

Supranasals small, widely separated by the large rostral, and occasionally fused to the still smaller postnasal. Prefrontals fairly large, usually separated, occasionally touching. Frontoparietals fused with each other and with the interparietal (in R20666 alone the interparietal is free). One pair of nuchals, rarely none. Supraoculars 4, the second largest, the first two in contact with frontal. Supraciliaries 6, rarely 5 or 7, the first largest, the boundary between them and the supraoculars being straight (not deeply indented as in *lineocellatus*). Upper labials usually 7, occasionally 8, the second last highest, the third last low and completely subocular. Ear lobules 1-4, mostly 2 or 3. 28 or 30 rows of mid-body scales. Subdigital lamellae sharply uncarinate, 20-27 under fourth toe.

The head and back is dark olive brown (whereas the head in *lineocellatus* is coppery brown and the back olive green with lines of small black spots or black-and-white ocelli). The tail is bright red in juveniles, usually becoming brown in adults. A silvery white streak runs back along the upper labials, across the ear, to immediately above the insertion of the arm, whence it occasionally extends to the groin. Above the white streak is a black streak, clearly defined below where it contacts the white, but vaguely edged above. Entire under surface whitish.

Distribution: Southern interior of Western Australia from Yamarna in the north-east and Youanmi in the north-west, south and east to Zanthus on the trans-Australian railway.

Comments: At first it was thought that *butleri* was a race of *lineocellatus*. However, the two are probably sympatric east of Kalgoorlie. The Zanthus specimen was taken midway between two series of *lineocellatus* (from Karonie and Naretha, respectively 60 miles west and 75 miles east of Zanthus).

This form is named after Mr. W. H. Butler who collected several of the paratypes (and many other reptiles from north and east of the Goldfields).

THYLACINUS AND SARCOPHILUS FROM THE NULLARBOR PLAIN

By D. L. COOK.

During a visit to Mundrabilla Station, Eucla Division, Western Australia, in January 1962, the author collected a number of canine teeth and an incomplete skull of *Sarcophilus harrisii* Boitard, 1841, together with numerous partly calcified seats (coprolites) of a carnivorous mammal, one of which subsequently proved to contain a tooth of *Thylacinus cynocephalus* Harris, 1808.

DESCRIPTION OF MATERIAL

Thylacinus cynocephalus Harris, 1808

A left M¹. This was the smallest of 24 Western Australian and Tasmanian specimens measured and is therefore considered to be from a female. No occlusal wear could be detected, which indicates a sub-adult animal.

Sarcophilus harrisii Boitard, 1841

Material consisted of a partly disconnected pair of maxillae and pre-maxillae of one adult animal and a number of dispersed canines representing more than one individual.

DISCUSSION

The following points combine to suggest that the cave was a lair of *Sarcophilus harrisii*:

1. Large numbers of coprolites made up of bone fragments, fur and calcium phosphate establish the cave as a lair of a carnivorous mammal.

2. The association of undamaged *S. harrisii* material most directly suggests that it was the inhabitant.

3. The *Thylacinus cynocephalus* molar in a coprolite suggests that this species was not the predator although it must not be overlooked that the Thylacine may have been predatory or a scavenger on its own kind.

4. Lairs of *S. harrisii* are previously known from caves, i.e., Nannup Cave (Devil's Lair), Boranup, Western Australia (Lundelius, 1960; Cook, 1960) and Wedge's Cave, 100 miles north of Perth, Western Australia (Lundelius, 1960).

If the coprolites were derived from *S. harrisii* as seems almost certain, the *T. cynocephalus* molar in one, may be an indication that *S. harrisii* preyed upon the Thylacine, or at least young and relatively weak individuals. However, this argument, is weakened by the knowledge that *S. harrisii* is, in part at least, a scavenger.

S. harrisii and *T. cynocephalus* have been previously recorded from Australia from Queensland (*S. harrisii* only), New South Wales, Victoria, and the south-west of Western Australia.

The records from Webb's Cave help to bridge the gap in the previously known past distribution of the two species.

Webb's Cave is rich in formations of two obvious ages; an older formation of brown and decayed calcite and a younger, white and undecayed formation which superimposes the older formation. It is apparent then that there were at least two periods when the humidity of the area was greater than now. The decline of humidity may have some bearing on why the two species in question are not living in the area at the present time.

Specimens are in the author's collection and will subsequently be given to the Western Australian Museum.

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LITERATURE CITED

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